



Pass-through Heated Cabinets

INSTALLATION - OPERATION - MAINTENANCE



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INTRODUCTION

Welcome

PASS-THROUGH CABINET - INTRODUCTION

Future Products Group (FPG)

Welcome to the world of FPG! Our products are designed and engineered to give you the optimal performance that you deserve with innovative visual merchandising appeal.

We are confident that you will be delighted with your state of the art inline food service cabinet, and that it will become a valued appliance in your store.

Guidance and Help

Any new appliance can seem very complex and confusing at first glance. To ensure you receive the utmost benefit from your new inline cabinet, there are two things you can do.

- Before operating the cabinet, please read the instruction book carefully and follow its recommendations. The time taken will be well spent. These instructions both general and technical tell you how to operate and look after your inline food service cabinet so that you can receive the full benefits that this cabinet has to offer.
 - These instructions cannot, however, cover all eventualities. If you are unsure of any aspect of the installation, instructions or performance of your cabinet, contact your dealer promptly or contact us via email to support@fpgworld.com.
-

Warranty

PASS-THROUGH CABINET - INTRODUCTION

Warranty Period

Future Products Group Limited warrants, to the original purchaser of an FPG manufactured food service cabinet, that for ONE YEAR (12 months) from the date of purchase, any defect in workmanship or material resulting in the product malfunctioning, while under correct use, will be rectified.

Liability under this warranty is limited to replacing or repairing a part, without charge.

Continued on next page

Warranty cont.

PASS-THROUGH CABINET - INTRODUCTION

Liability Exceptions

Liability under this warranty does not include:

- Any loss, or damage or expenses directly or indirectly arising from use or inability to use the product or from any other cause.
 - Any part of the cabinet which has been subject to misuse, neglect, alteration, incorrect installation, accident, or damage caused by transportation, use of abrasive or caustic chemicals, flooding, fire or acts of God.
 - Any damage or malfunction resulting from the use of non-FPG supplied spare parts.
-

Specific Exclusions

The following are specifically excluded from warranty:

- Breakage of glass or plastic components or the replacement of LED assemblies or gaskets.
 - Failure to re-assemble the cabinet correctly after cleaning.
 - Fair wear and tear.
-

Assessment

The liability under this warranty is dependent on an assessment by FPG, to determine the defect in workmanship or materials.

Time Limit

FPG does not guarantee that any service to be performed under this warranty will be carried out within any particular time limit.

Caution

No warranty claim will be accepted unless authorised by FPG prior to commencement of service.

OPERATION

Cabinet Layout

PASS-THROUGH CABINET - OPERATION

Pass-through Cabinet

This is an open style pass-through cabinet, featuring radiant heating elements incorporated into the ceiling and shelves.

The cabinet is fitted with two shelves, and items may also be placed on the base tray.

The shelves and base slope, and appropriately sized chutes ensure an orderly feed of products to the service side.

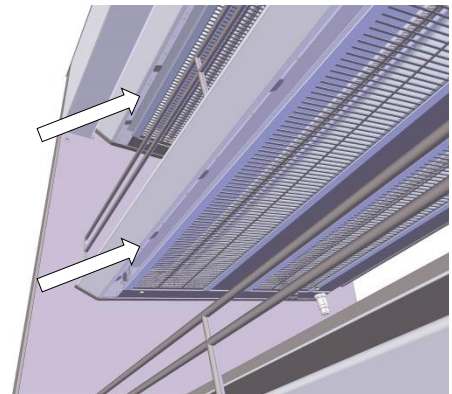
The cabinets are designed to be free standing, and multiple cabinets can be placed side by side.



Lighting

Cabinets are fitted with LED lighting.

Lighting strips are fitted in the ceiling of the cabinet and below the shelves to illuminate product.



Controls

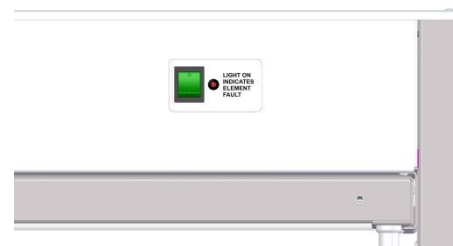
PASS-THROUGH CABINET - OPERATION

Control Panel

The controls are located on the back of the cabinet, and comprise:

- The main power switch
- An element failure indicator light

The main switch controls both heating and lighting.



Preparation

PASS-THROUGH CABINET - OPERATION

Power Supply Ensure that power is connected to the cabinet.
Turn on the main power switch, as shown above.

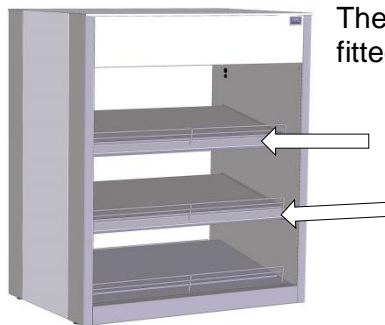
Fit Chutes Place the product chutes on the shelves and base.

Pre-heat the Cabinet Pre-heat the cabinet for 15 minutes, before loading with product.

Load Cabinet Load cabinet with pre-heated product.

The cabinet is designed to maintain the temperature of pre-heated product. It is not an oven, and consequently, if cold product is introduced, there could be a considerable delay before the correct temperature is reached.

Ticketing



The front and rear edges of the shelves and base are fitted with bars, to carry ticketing/label holders.

Operating Routines

PASS-THROUGH CABINET - OPERATION

Operating Environment The cabinet is designed to maintain products at a temperature above 65°C.
The heating system is designed to maintain this temperature, provided the cabinet is not located in a draughty location.

Do not place electric fans close to the cabinet.

Cleaning It is recommended that cabinets be cleaned at the end of the working day, since they need to be shut down for this.

Allow the cabinet to cool for approximately 30 minutes before starting to clean it.

Once cleaning is finished, switch the cabinet on again and allow it to reach the working temperature before introducing the pre-heated products.



TROUBLE SHOOTING

Element Failure Indication The red light on the control panel will come on, if one or more elements fail.
Turn the cabinet off and remove all food from the cabinet. Call for service.

FAULT	POSSIBLE CAUSE	REMEDY
Cabinet does not operate/start	The mains isolating switch on the wall, circuit breaker or fuses are off at the power board	Turn isolating switch circuit breaker or fuses on
	The power switch on the cabinet is OFF	Turn the power switch ON
	The power switch on the unit is faulty	<i>Have the switch replaced</i>
Cabinet does not reach temperature	The cabinet is in a draught	Eliminate the draught
	The element timer is faulty	<i>Have timer replaced</i>
	An element is blown	<i>Have the element replaced</i>
Cabinet lights not working	A LED power supply has failed	<i>Replace LED power supply</i>
	A LED driver has failed	<i>Replace LED driver</i>
	An LED strip has failed	<i>Replace LED assembly</i>
	Internal breaker tripped/failed	<i>Have wiring checked and reset or replace breaker</i>
Aluminium parts corroded	Caustic detergent damage	Order replacement parts

Service Personnel Only The table entries in ***italics*** indicate actions to be taken only by qualified Service Personnel.

CLEANING

Cautions

PASS-THROUGH CABINET - CLEANING

Power **ALWAYS TURN THE POWER SUPPLY OFF BEFORE CLEANING.**

Water **THIS UNIT IS NOT WATERPROOF. DO NOT USE A WATER JET SPRAY TO CLEAN ANY PART OF THIS CABINET.**

Cleaning Products

PASS-THROUGH CABINET - CLEANING

Metal Surfaces Stainless steel or aluminium surfaces should be cleaned with a cloth and hot soapy water.

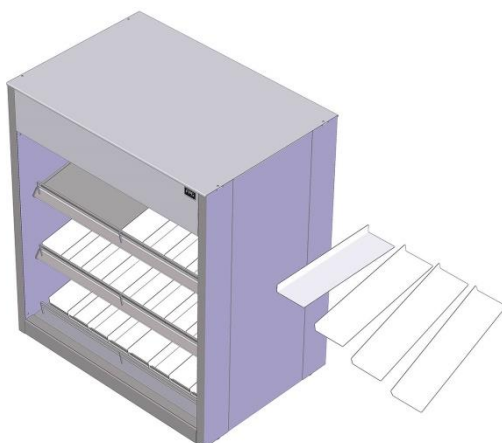
Use a good quality metal polish to remove stubborn marks.

DO NOT clean surfaces with abrasive pads or cleaners, as stainless steel and aluminium surfaces will be damaged.

Removable Parts

PASS-THROUGH CABINET - CLEANING

**Shelf and Base
Trays**



The product chutes are all removable.
Since they are made of stainless steel, they can be cleaned in a dishwasher if desired.

Continued on next page



Cleaning Routines

PASS-THROUGH CABINET - CLEANING

Schedules	To maintain optimum performance, cleaning must be regular and thorough. It is recommended that a schedule of cleaning operations be established.
Inspection	As part of the cleaning routine, the controls, mechanical parts and electrical wiring should be inspected for damage, deterioration or need of adjustment.
Correction	If any small faults are found, have them attended to promptly by a competent serviceman. Don't wait until they cause a complete breakdown.

INSTALLATION

Regulations

PASS-THROUGH CABINET - INSTALLATION

Compliance with Local Requirements

It is very important that your food cabinet is installed correctly and that the operation is correct before use. Installation must comply with local electrical, health & safety and hygiene requirements.

Setting Up

PASS-THROUGH CABINET - INSTALLATION

Unpacking

Unpack and check unit for damage and report any damage to the carrier and supplier. Report any deficiencies to your supplier.

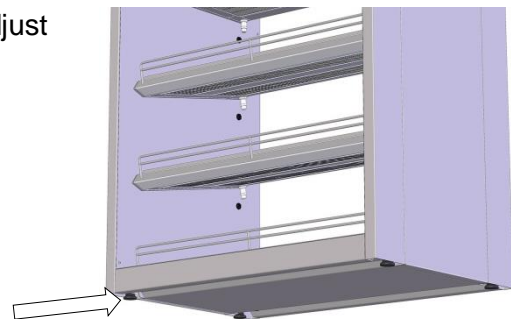
Cabinet Preparation

Remove all tapes, ties and packers, used to prevent movement during transit. The cabinet is supplied fully assembled, except for the product chutes, which are packaged separately.

Check that all plastic film protection has been removed from surfaces, otherwise it will melt when the cabinet heats up.

Positioning the Cabinet

Place the cabinet on the counter, and adjust the four screw feet, to set it level.



Location

PASS-THROUGH CABINET - INSTALLATION

Operating Environment

The cabinet is designed to maintain products at a temperature above 65°C. The heating system is designed to maintain this temperature, providing the cabinet is not located in a draughty location. Do not place electric fans close to the cabinet.



Power Supply

PASS-THROUGH CABINET - INSTALLATION

Power Supply Connection

The cabinet has a fixed mains lead, exiting from the underside of the cabinet via the control panel.

Before connecting to the power supply, check that the local supply is correct to that shown on the rating label.

Electrical Isolation

An accessible means of isolation must be provided in the electrical supply to the cabinet.

The supply socket must be accessible with the cabinet in its working position.

Earthing

THIS APPLIANCE MUST BE EARTHED/GROUNDED

The cabinet should be earthed via the earth lead in the mains cable.

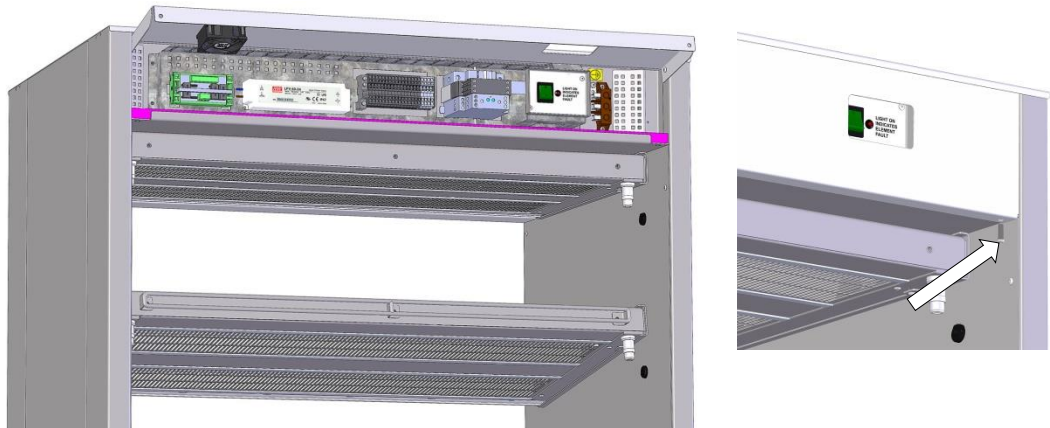
SERVICING

Control Gear

PASS-THROUGH CABINET - SERVICING

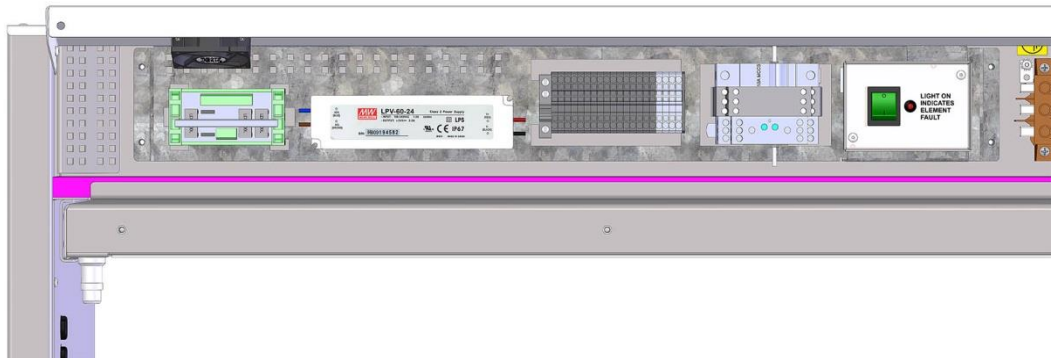
Caution DO NOT service lights without isolating the cabinet at the main switch or unplugging it from the wall.

Access to Control Gear Remove two M4 screws located on the underside of the roof section at the rear of the cabinet.



Open the rear access door to its full extent.
The Control Gear can be accessed directly upon opening the rear access door.

Control Gear Components



The chassis houses the mains switch and fault light, low voltage power supplies, LED drivers, an asymmetric timer and an under-current relay.
An MCB protects the lighting circuits and the base element. See Circuit Diagram.

Element Failure

PASS-THROUGH CABINET - SERVICING

Failure Indication

In the event of one or more infrared elements failing, the under current relay will close and turn on the element failure LED, on the control panel.

The cabinet will continue to operate, but heating will be impaired.

Correction

Locate and replace the faulty element or elements. Turn the cabinet power back on and check the operation of all elements. The front elements are turned on with the first cycle time (4min). The rear elements are turned on with the second cycle time (4min).

During the fault condition, the relay which has detected the fault will have its yellow and red status indicator LEDs on.

Light Failure

PASS-THROUGH CABINET - SERVICING

Fault Location

If a light fails, check the power supply and LED driver before replacing an LED strip.

Element and Light Replacement

PASS-THROUGH CABINET - SERVICING

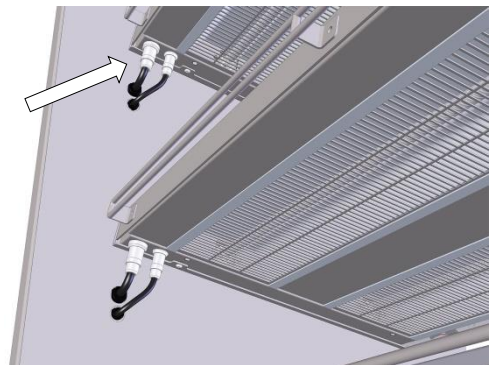
Removing a Heating Assembly

Unplug the Electrical Supply leads for elements and lights on both sides.

Unscrew x2 Button Head Screws that fasten the shelf heating assembly to the shelf mounting Brackets.

Slide the shelf heating assembly out of the unit from the rear.

The top heating assembly is the same as the others.



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Element and Light Replacement cont.

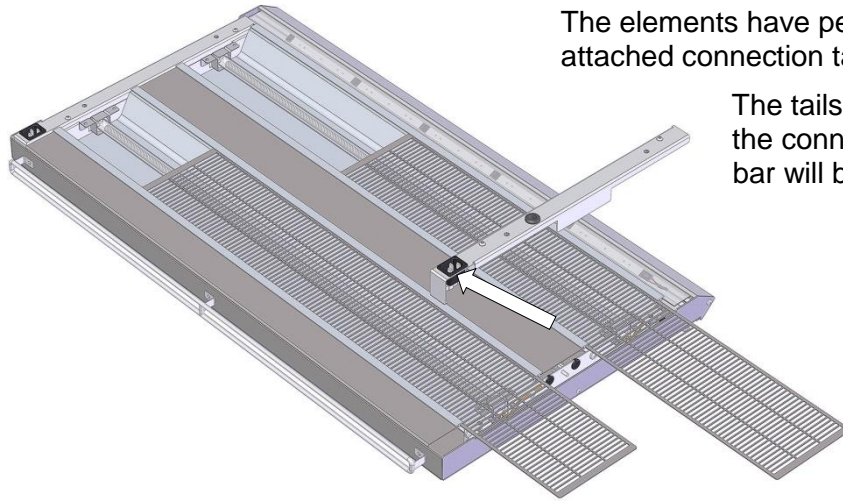
PASS-THROUGH CABINET - SERVICING

Element Access

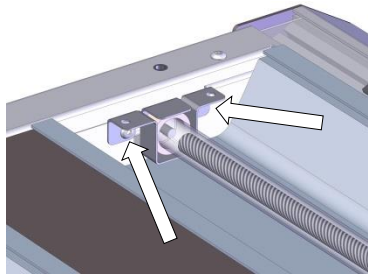
Unscrew and move the side bar, to slide out the protective grilles.

The elements have permanently attached connection tails.

The tails are soldered to the connectors, so the bar will be held captive.



Element Replacement



Unscrew the element retaining brackets, to allow the element to be withdrawn.

The tails may either be cut, or unsoldered from the connector.

The tails of the replacement element must either be soldered to the connector, or spliced to the cut old tails.

If spliced, the joins must be insulated with a high temperature sleeves.

Light Replacement



To dismantle the light assembly, remove the screws at each end.

Disconnect the old LED strip.

Slide out the old strip and replace with a new one.

Reconnect the cable, and re-assemble the light.



SPECIFICATIONS

Mechanical

	CABINET MODEL	
	IN-H-PT-A001	
Height	1070 mm	
Width	921 mm	
Depth	630 mm	
Dry Weight	kg	
Height Adjustment	-0 + 10mm	
Cabinet Material	Stainless steel	
Number of Shelves	Two plus base	
Climatic Class / IP	All cabinets are suitable for class N climates and have an IP 22 rating	

Electrical

	CABINET MODEL	
	IN-H-PT-A001	
Supply Voltage	230 – 240V single phase	
Maximum Current	8.7 A	
Power	2.0 kW	
Mains Connection	Three core cable and 10A plug	
Top Lights	1 x LED strip	
Shelf Lights	2 x LED strips	
Heating Elements	6 x 600W radiant elements 1 x 150W wire base element	

Element Timing

	IN-H-PT	Finder Settings
Front Elements	4 min ON (T2)	D=4min E=0.5–10min
Rear Elements	4 min ON (T1)	B=4min A=0.5-10min

Current Monitor Relay Settings

	IN-H-PT	Units / Range
Range	3-15A	B3-C
Hysteresis	25%	Hyst
Threshold	6A	IA
Tripping Delay	10s	Tv
Start-up Delay	10s	Ts
Dip Switch Settings	ON-OFF-ON-OFF	1, 2, 3, 4

Compliance

Safety Aspects This cabinet has been designed to comply with the relevant requirements of the following specifications:

- AS/NZS 3100 : General Requirements for Electrical Equipment
- IEC 335: Heated Food Cabinets
- AS/NZS 3820 : Essential Safety Requirements
- AS/NZS 4417 : Marking of Electrical Products

Performance Aspects The cabinet is HACCP compliant, with the following performance:

Cabinet Operating Temperature	Test Conditions
>65°C	23°C Ambient with 65% RH

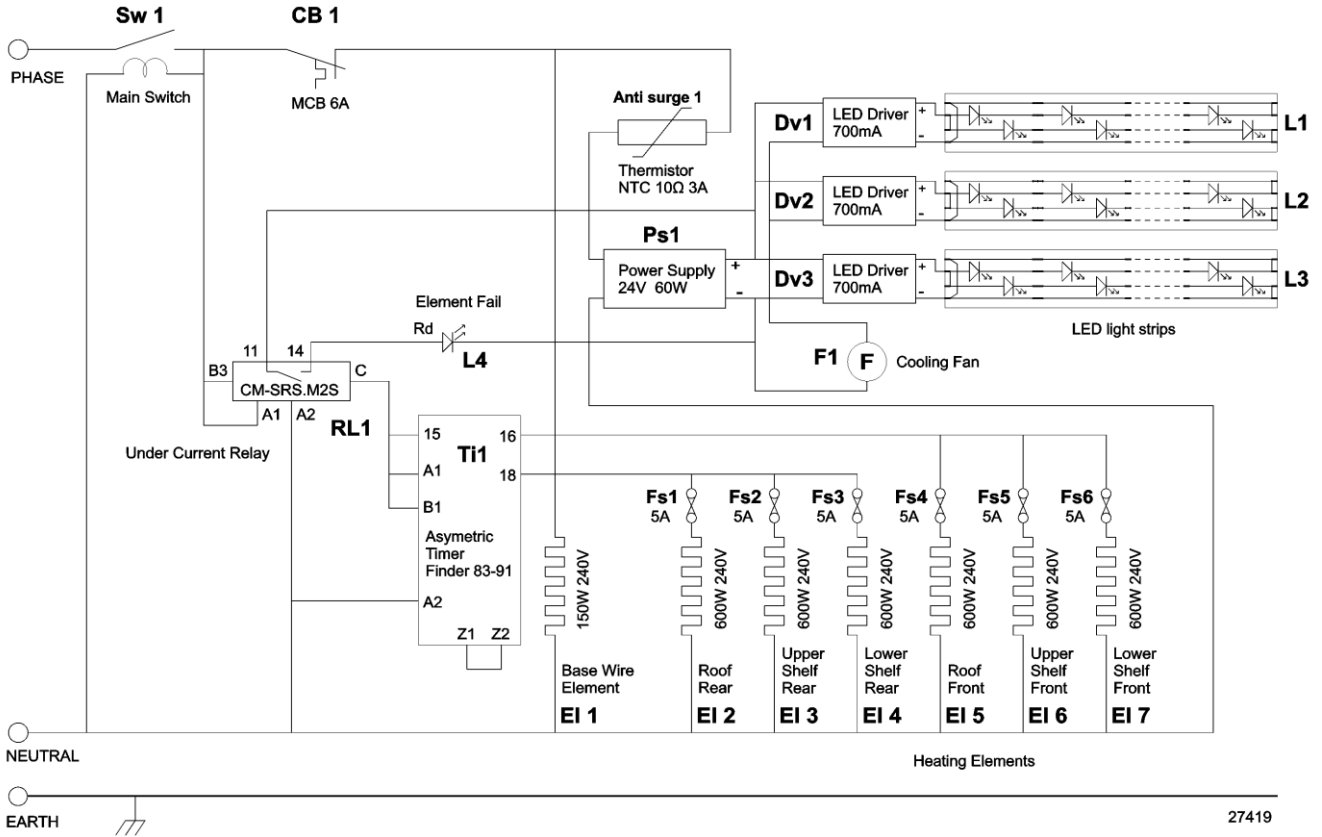
Improvements

On-going Development FPG reserves the right to change specifications and construction, as part of on-going product improvement.

ELECTRICAL CIRCUIT DIAGRAMS

Model: IN-H-PT-A001

Pass-through Heated Cabinet



27419

SPARE PARTS

Cabinet Serial Number

When ordering spare parts, it is important to quote the Serial Number printed on the identification label. This will enable FPG to trace details of the build specification of your particular cabinet and hence ensure that spare parts are fully compatible.

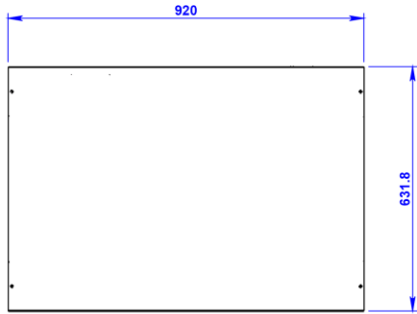
To satisfy warranty conditions, and ensure optimum performance, use only FPG supplied spare parts.

Part Description	FPG Part Number
Main Switch	17287
24V 60W power supply	21613
Ant-surge Thermistor 10 Ohm 3A	22354
LED Driver 700mA	25762
Cooling Fan 60 x60mm 24V	23282
Light Replacement Kit	71593
Element fail indicator led	19535
Light diffuser	27047
Asymmetrical Timer (Finder 83.91)	24932
Under-Current Relay (ABB CM-SRS.M2S)	25200
Circuit Breaker 6A	10522
Fused Element Connectors (ST 4-HESI)	18471
5A Slow Blow Fuse Link	13330
Product Chute	80657
Radiant Heating Element 600W 240V	25946
Base Element 150W (Wire 150 Ohms/metre)	12197
Product Manual for Pass-through Heated Cabinet	27025

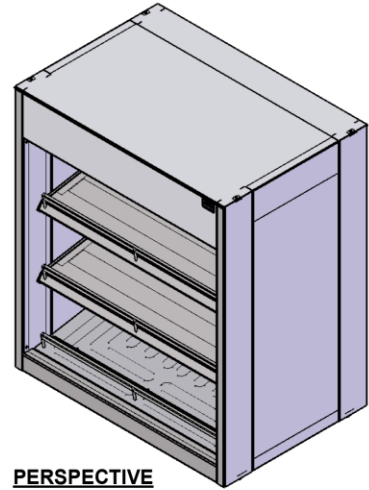


MECHANICAL DRAWINGS

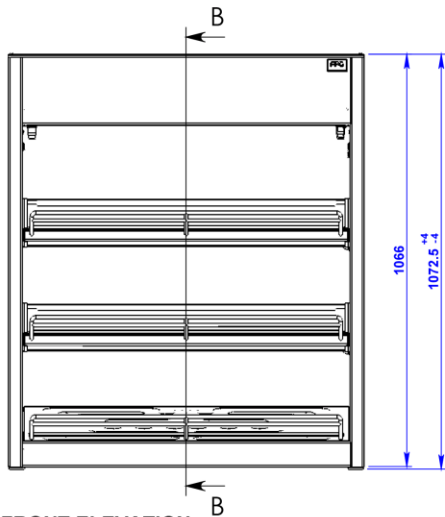
IL-H-PT-A001



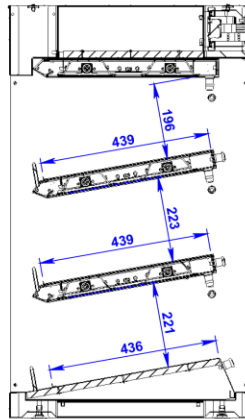
PLAN



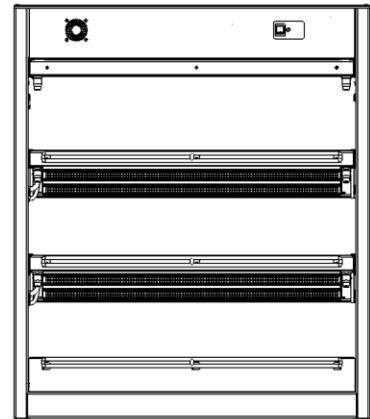
PERSPECTIVE



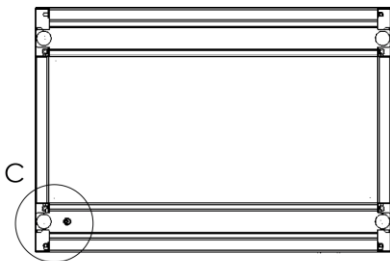
FRONT ELEVATION



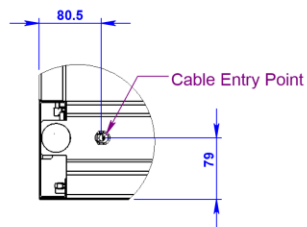
SECTION B-B



REAR ELEVATION



BOTTOM ELEVATION



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